

of the students while enabling students to broaden their understanding of environmental justice issues. In addition, we wanted the students to gain practical experience in working with groups and neighborhoods. Class sessions included lectures on segregation, income inequality, sprawl, housing affordability, lead, asthma, community gardens, and other topics focused on the problems of inner-city environmental health.

### **Results**

Class projects were a study of the feasibility of community greenhouses to remediate lead-contaminated residential soils in a neighborhood that has had high rates of childhood lead poisoning; an environmental justice study of capital expenditures of the local transportation agency that compared a bus route that replaced an abandoned inner-city elevated mass transit line to a new suburban commuter rail extension; and a planned series of lunch-time walks that highlighted local history, architecturally significant buildings, and environmental resources to facilitate the connection of the medical center complex to the surrounding community and promote physical activity to combat obesity.

### **Conclusions**

Lessons learned included the need to begin project planning 3 to 6 months in advance of the start of class, the need to understand and articulate the concerns of community partners, the utility of integrating class assignments and lectures with projects, and benefits associated with micromanaging projects to ensure that potential problems are solved in advance of project completion deadlines.

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## **HEALTH CARE DELIVERY AND POLICY**

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### **The Designated Medical Profile: Individualized Patient Care Plans for Challenging Patients Presenting in an Inner-City Emergency Department**

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#### **ABSTRACT**

#### **Objectives**

The designated medical profile (DMP) program was designed and implemented at St. Paul's Hospital, Vancouver, British Columbia, Canada, in 1998 as a way to provide effective, appropriate, and consistent care to patients who present at the emergency department (ED) frequently or who have complex health and social issues and/or challenging behaviors. Patients must exhibit two or more of the following to be considered for inclusion in the DMP program: drug or alcohol abuse, drug-seeking behavior, abusive behavior, complex medical problems, chronic medical problems, and frequent use of other hospitals.

#### **Methods**

The DMP consists of a care plan, established by a multidisciplinary hospital- and community-based committee, that provides ED staff with a way to obtain quick information about the patient's health status, community connections, and guidelines for care. The care plan is available to all professional staff and aids staff in decision making regarding the patient. The aim of the DMP is twofold: to provide staff with a tool that helps them render improved

care to the DMP patient and to reduce the demand on hospital resources by the patient. The patient's status as a participant in the program is flagged in the hospital's database; on arrival in the ED, the patient's DMP care plan is attached to his or her chart.

### **Results**

A study by Pope et al. in 2000 indicated that DMP patient visits to St. Paul's Hospital ED decreased significantly in the 12-month period following the implementation of their care plans. However, it is acknowledged that there are many possible confounding variables. A new study is under way to discern the ED staff's perceptions of the effectiveness of the DMP; as well, the study will examine more thoroughly the indicators of hospital use pre- and post-DMP implementation.

### **Conclusions**

Thus far, the DMP program appears to be working well at St. Paul's Hospital. But, for whom? According to anecdotal evidence, the care plans are helpful to staff and provide a "road map" for care. However, important questions remain:

- By flagging patients, are we inadvertently sanctioning biased care?
- Are patients using more appropriate resources in the community? Are they avoiding care entirely? Or, are they obtaining care at other hospitals in the community?
- What are the moral-ethical implications of such a program? Specifically, are we empowering patients to make healthier choices, or are we continuing a paternalistic tradition of the medical model?

We believe that the DMP program has demonstrated benefits, but are cognizant of the need for thoughtful, appropriate process, implementation, and evaluation. This is of particular concern in an inner-city hospital, in which many patients are vulnerable due to their marginalization.

## **Making a Difference: a Mobile Community Health Bus in the Inner City**

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### **ABSTRACT**

#### **Objectives**

The purpose of the Community Health Bus (CHB) is to provide social services information and dental, immunization, and public health nursing services to people living in the inner city of Hamilton, Ontario, Canada. We studied the use of the CHB in relationship to its impact in decreasing barriers to health care access.

#### **Methods**

Data collection was through the creation and use of a computer database. The user data were summarized into categories and analyzed for themes relating to access.

#### **Results**

We found that the CHB was serving people with multiple barriers to accessing health care, including poverty, homelessness, lack of a health card, and lack of a family doctor or dentist. Based on these results and the need to address other determinants, strategies were implemented to increase the use of the CHB by youths, children, and people who do not speak English.

### *Conclusions*

We determined that the CHB has addressed some barriers to health care access for specific populations in the inner city. Further development of strategies to improve access may involve changes and additions to the services on the CHB and/or changes in policies that affect access to nonmobile services.

## **Transforming a Teaching Hospital: Strategic Change Processes and the Emergence of the Urban Health Initiative at the Wellesley Hospital in the Early 1990s**

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### **ABSTRACT**

#### *Objectives*

The aims of the study were to describe the process of strategic change at The Wellesley Hospital (TWH; a public general teaching hospital affiliated with the University of Toronto, Ontario, Canada) and to document the emergence of the Urban Health Initiative (UHI; a set of ideas, programs, and processes designed to improve the health and well-being of disadvantaged communities in southeast Toronto) in the early 1990s. A major area of investigation was how TWH developed "effective interventions" to improve the health of urban populations. Specific questions included the following: Why did TWH require a new strategy? How were innovative elements of the strategy (UHI, citizen participation) translated into practice? What roles did different groups play in revitalizing the organization, reducing inequalities, and creating healthy communities? To what extent were organizational goals achieved? What was the pace and degree of change? Is the UHI a useful model for other hospitals wishing to transform their organizations and respond to the unique needs of inner-city communities?

#### *Methods*

Data sources included both archival documents (e.g., strategic plans, meeting minutes, internal/external correspondence, major reports) and in-depth interviews with key participants in the change process (e.g., former chief executive officer, chair of HIV/AIDS Community Advisory Panel, Chair of Neighbourhood Relations Committee, UHI coordinator). Archives and interview transcripts were subject to qualitative analysis and validated by interviewees.

#### *Results*

Using the configuration model as a conceptual framework, the change process was analyzed in three stages: development, conceptualization, and implementation of the 1991 strategic plan. In response to community and university concerns, this new strategy served as the key mechanism for transforming hospital culture and structure and aligning programs/services with community needs. In the process of transformation, TWH successfully implemented several initiatives: community advisory panels for priority services/populations (e.g., HIV/AIDS, mental health); participatory decision making; greater community feedback (e.g., open forums); and the UHI, which addressed socioeconomic determinants of health in service, teaching, and research. Consequently, by 1995, TWH had largely achieved six major organizational goals: improving hospital-community relations, improving patient-staff relations, integrating with community services, addressing the unique needs of local communities (e.g., gay/lesbian, poor, homeless, refugees, single mothers), overcoming financial difficulties, and remaining a teaching hospital.

### *Conclusions*

In its sociohistorical context, TWH experienced a “revolutionary paradigm shift.” This paper highlights the importance of partnerships between health institutions and citizens/consumers in improving the health of disadvantaged communities; it explores theoretical implications and principles for use by other hospitals.

## **Economic Evaluations of Community-Based Care: Lessons From 12 Studies in Ontario**

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### **ABSTRACT**

#### *Objectives*

A series of 12 randomized trials examined clients in community settings in southern Ontario, Canada; these clients suffered from a variety of chronic physical and mental health conditions. These studies were appraised using a framework for evaluating possible outcomes of economic evaluation.

#### *Methods*

In the 12 studies, sample composition and size varied. Each study was designed to quantify the well-being outcomes and expenditures associated with different community-based approaches to care provided in the context of a system of national health insurance. Multiple-perspective client well-being outcome measures were used. In 2 studies, caregiver burden also was analyzed. A common approach to quantification and evaluation of expenditures for service consumption was used in all 12 studies.

#### *Results*

The nature of community-based health services (health vs. disease care orientation) was found to have direct and measurable impact on total expenditures for health service utilization and client well-being outcomes. In most cases, a recurring pattern of equal or better client outcomes, yet lower expenditures for use of community-based health services, was associated with well-integrated health-oriented services. Integrated services aimed at factors that determine health are superior when compared to individual, fragmented, disease-oriented, and focused approaches to care.

#### *Conclusions*

The main lessons from the 12 studies are that it is as effective or more effective and as expensive or less expensive to offer complete, proactive, community health services to persons living with chronic circumstance than to provide focused, on-demand, piecemeal services. Complete services would have a psychosocial and mental health focus included with the physical care approach. Furthermore, people with coexisting risk factors (age, living arrangements, mental distress, and problem-solving ability) are the ones who most benefit at lower expense from health-oriented, proactive interventions.

## **Issues in the Development and Implementation of Home Visitation Services: a Case Study**

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### **ABSTRACT**

#### ***Objectives***

This poster session concerns a descriptive study of Denver's Best Babies Initiative, specifically the Healthy Futures (HF) program. This session will enable participants to identify issues that have an impact on planning and implementation of a case-management program targeting low-income women living in the inner city of Denver, Colorado. Participants will be able to describe the program and the theoretical model on which it is based. Presentation will place equal emphasis on clinical outcomes and methodological issues in evaluation of the program.

#### ***Methods***

We will enroll 125 women with prior children who are at significant risk of a poor pregnancy outcome. Some of the risk factors that determine eligibility include prior premature or low-birth-weight baby, teen with other children, pre-existing health factors that jeopardize the pregnancy, substance abuse, mental illness, baseline domestic violence, homelessness, history of involvement with Child Protective Services, and so on. Either a nurse or a social worker visits participants in their homes. Contact varies with need and is focused on making behavioral change to improve overall health and family functioning. Demographic, medical, social, and psychological information is collected at enrollment, 36-week gestation, delivery, and when the child reaches 6, 12, 18, and 24 months of age. In addition, child development is assessed through videotaped sessions when the child is 4, 12, and 24 months of age.

#### ***Results***

This program is still in its infancy; therefore, the results available for presentation are preliminary and based on a small number of clients. However, some trends are appearing. Women enrolled in the program are demonstrating a higher than Denver Health Baseline (DHB) rate of achieving recommended weight gain during pregnancy, higher than DHB rate of complying with recommended immunizations, higher than DHB rate of initiation of breast-feeding, and lower than DHB rate of repeat pregnancies within a year. Of significant concern, however, is the attrition rate of clientele in the program and its impact on the evaluation of HF. The proposed presentation will include discussion about this issue and attempts to resolve it.

#### ***Conclusions***

Based on early numbers, it appears as though HF is having an impact and beginning to achieve some of its goals. However, concerns about the number of participants who are able to complete the program are significant and may ultimately limit statements that can be made about this program and its approach.

## A Hospital's Role in Reaching Out to Its Community

Yasmin Vali and Glenna Raymond

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### ABSTRACT

#### *Objectives*

The Scarborough Hospital (amalgamated Scarborough General Hospital and the Salvation Army Scarborough Grace Hospital) is a major provider of hospital services in the city of Toronto, Ontario, Canada, with approximately 80% of patients residing in Scarborough.

The demographics of Scarborough have changed dramatically. Health services need to be more sensitive and responsive to the needs of a very diverse community—refugees, immigrants, the homeless, people not eligible for health insurance or without documentation to access health insurance.

The Scarborough Hospital recognized

- The changing community
- Barriers to accessing care
- Inequalities in health care
- Focus on promoting a healthy community

Health care needs in Scarborough are greatly impacted by the diversity of ethnic and racial groups, poverty, and settlement issues. The hospital was challenged to provide services that were culturally, racially, and linguistically sensitive to this inner-city community and established a dedicated department to guide program development and access to care. The Department of Ethno-racial Patient Services is considered unique and the first of its kind in Ontario. The hospital also responded with community and home programs in service areas such as mental health, hemodialysis day care, and palliative at-home program.

The hospital's strategic plan asks all hospital programs to include emphasis on health promotion and disease prevention. Our Family Wellness Centre (identified as an exemplar of health promotion in a primary care setting) focuses on hospital and community-based health-promotion initiatives.

#### *Methods*

Methods used were

Community needs assessment  
Strategic partnerships  
Hospital organization and structural changes

#### *Results*

For the Department for Ethno-racial Patient Services,

- Volunteer interpreter services meet more than 90% of need.
- All new staff receive training to provide culturally sensitive care.
- Community partnerships identify new needs.

The Family Wellness Centre has

- participatory community research in gestational diabetes,
- partnerships for a community youth drop-in center,
- program development for specific needs: asthma education for the Tamil community, car seat safety, health-promoting emergency.

For the Volunteer Health Clinic,

- The hospital provides ongoing care to patients referred from the Volunteer Health Clinic.

- The hospital supports and encourages Volunteer Health Clinic staff.
- The hospital provides administrative and financial services support.

(Patient visits show patient origins from more than 80 countries.)

#### *Conclusions*

This paper supports the significant hospital role in community-based initiatives, and programs within the community, to demonstrate responsiveness and outreach to its community. The Scarborough Hospital embarked on its own cultural and structural changes to establish departments and programs to meet the diverse and unique needs of a community, shifting from a suburban to a city profile.

### **Development of a Model for Hospital and Community Collaborating in Delivery of Community Health Interventions: Meeting the Needs of Populations in Toronto Downtown Inner-City West**

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#### **ABSTRACT**

##### *Objectives*

To improve the health status of a multilingual, culturally and socioeconomically diverse urban community in downtown west Toronto, Ontario, Canada, University Health Network (UHN) developed a framework for interventions that enhance health and promote effective utilization of health services. The Healthy Connections Program of the Toronto Western Hospital, a part of UHN, is the outgrowth of this framework.

##### *Methods*

1. We made an extensive review of medical, health, and social science literature concerned with community-based hospital activities for clinical services, health promotion, and health literacy.
2. The development of a community profile for the hospital's catchment area utilizing census data, public health data, and interviews with key informants was undertaken.

##### *Findings/Challenges*

Many areas within Toronto Western Hospital's catchment have a high proportion of adults with low literacy skills and less than a ninth grade education. A significant proportion do not speak English as a first language. These features make the population hard to serve. Within this context, we identified three major population streams that were underserved: women, youths, and seniors.

One of the possible consequences of inadequate literacy is a compromised health outcome. People in the primary catchment report worse health status than those in other parts of the city, and in general, they have less understanding about their medical conditions and treatment.

##### *Results*

We developed interventions to improve access, integration, and coordination of care for members of our underserved populations. We also developed and implemented two practice-

based streams, both in and outside the catchment, to meet the needs of people with, for example, mental health and addictions problems. Our approach to service provision not only allows for access, but also builds community capacity by developing partnerships with community agencies and builds on community knowledge of Toronto downtown west.

### *Conclusions*

Targeted culturally and linguistically appropriate community-based health interventions are a feasible and potentially effective response to a diverse and challenging population. Maintenance of health status and increasing appropriate use of health services are key foci for these interventions. We describe the approach of the Healthy Connections Program at Toronto Western Hospital and its transformation of a community profile and research database into a series of health-promoting “upstream” interventions.

## **Key Health Services and Health Care Accessibility Through School-Based Health Centers: a Preliminary Analysis**

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### **ABSTRACT**

#### *Objectives*

We developed a unique system for delivering health services and improving access to care for inner-city school-aged children. Our objective is to identify parameters that document prior lack of key health services that can be followed to evaluate the effectiveness of the program. By establishing school-based health centers within a single feeder pattern, free medical and social services are delivered directly on site. The feeder pattern (which is comprised of three elementary schools, one middle school, and the corresponding senior high school) theoretically makes it possible for students to receive continuity of care from grades kindergarten through 12. This model also allows for long-term tracking of students and various key health services.

#### *Methods*

All subjects attend school within the feeder pattern, which is 65% black and 30% Hispanic, with the remaining 5% Asian and Caucasian. All subjects have equal access to key health and social services. Documentation of care rendered is maintained on nursing and social service assessment forms. Data are also collected via parent/student surveys and medical and family histories. If indicated, data are collected from local, county, state, and national statistical reports for comparison. Key health services are then tracked during the year and as the subject transitions from one school to another within the feeder pattern, that is, from the elementary to the middle school or from the middle school to the senior high school.

#### *Results*

Preliminary data demonstrate the following:

Body mass index data have been collected on all kindergarten and third-grade students. Students deemed at risk, approximately 20%, have been given the opportunity for additional blood pressure, glucose, and cholesterol screening and counseling.

The immunization program has encouraged and achieved immunization compliance rates of 97%.

An initial tuberculosis screen of one class resulted in 27% positive tuberculin skin tests.

Feeder pattern schools placed fewer 911 emergency calls after implementation of the project in comparison to academic years without school-based health centers.



Blood pressure screening of 690 students in the 10th grade demonstrated that 150 (20%) had blood pressure readings greater than the 90th percentile.

#### **Conclusions**

As manifested through tracking of various key health services, systems that increase health care accessibility render it possible for more underserved populations to receive health care. This also facilitates identification of additional key health services or indicators that warrant further attention.

## **Socioeconomic Factors and US Health Policy**

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#### **ABSTRACT**

##### **Objectives**

Research suggests a strong link between socioeconomic factors and health. Some researchers emphasize the direct impact of poverty and deprivation on health, while others focus on the effects on inequality within a society. There is also evidence that race is inextricably linked to socioeconomic status, but displays an independent effect on health such that, in every income group, the health of black Americans is worse than that of their white American counterparts. This research has suggested an extensive policy agenda that requires intersectoral action. This paper considers strategies for overcoming barriers to action on this policy agenda. It is adapted from material we presented in a *Health Affairs* 2002 article.

##### **Methods**

Researchers have examined various mediators, not necessarily mutually exclusive, among socioeconomic status, race, and health—the presence or absence of trust and social support at the state or community level, irreversible processes in early childhood, the biological effect of stress throughout life, and the impact of individual and institutional racism. Their policy agenda includes health care, education, housing, and other services for the neediest; a more equal economic environment; investment in young children; improvements in working conditions and benefits; and community support. In the United States, we have extensive experience with community efforts that combine health care, education, and economic development. We examine political, professional, and organizational barriers to more extensive intersectoral policy action and propose strategies to address these barriers to help achieve the ambitious Healthy People goals of improving national health and eliminating health disparities by race, ethnicity, gender, and income.

##### **Results**

Strategies to overcome these barriers include demonstrating incremental and intermediate actions and cost-effectiveness; focusing on segments of the population for which economic impact or political interest is greatest; finding common ground with advocates of universal health care; making peace with the health behaviorists; building on public health constituencies; involving states and communities; appointing a special commission; establishing a federal locus of collaboration; and conducting health impact assessments of changes in non-health policy and practice.

##### **Conclusion**

Barriers to collaboration can be addressed by careful attention to political and economic beliefs and national values and language, the quality and relevance of research, the effectiveness of dissemination and outreach, and the creative use of governmental institutions at all levels.